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22462 7590 09/28/2009

GATES & COOPER LLP
HOWARD HUGHES CENTER
6701 CENTER DRIVE WEST, SUITE 1050
LOS ANGELES, CA 90045

EXAMINER

RAMPURIA, SHARAD K

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 09/28/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,626	07/26/2000	William C.Y. Lee	139.136USU1	8528

TITLE OF INVENTION: NETWORK ENGINEERING IN A WIRELESS NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	12/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

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A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUE FEE**
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22462 7590 09/28/2009

GATES & COOPER LLP
HOWARD HUGHES CENTER
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LOS ANGELES, CA 90045

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or by facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

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nonprovisional	NO	\$1510	\$0	\$0	\$1510	12/28/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
RAMPURIA, SHARAD K	2617	455-439000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
<input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.	1_____
<input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	2_____
	3_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee name will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

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(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)
<input type="checkbox"/> Issue Fee	<input type="checkbox"/> A check is enclosed.
<input type="checkbox"/> Publication Fee (No small entity discount permitted)	<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.
<input type="checkbox"/> Advance Order - # of Copies _____	<input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)	<input type="checkbox"/> a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.	<input type="checkbox"/> b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).
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NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form or your suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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22462	7590	09/28/2009		EXAMINER
GATES & COOPER LLP HOWARD HUGHES CENTER 6701 CENTER DRIVE WEST, SUITE 1050 LOS ANGELES, CA 90045				RAMPURIA, SHARAD K
				ART UNIT 2617 PAPER NUMBER
DATE MAILED: 09/28/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 913 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 913 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No. 09/625,626	Applicant(s) LEE ET AL.
	Examiner SHARAD RAMPURIA	Art Unit 2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 07/13/2009.

2. The allowed claim(s) is/are 2-6,8-10,12-15,17-21,23-25 and 27-30.

3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of the:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____. | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

/Sharad Rampuria/
Primary Examiner, Art Unit 2617

DETAILED ACTION

Attached are amended claims in response to the Decision on Appeal (BPAI Decision - Examiner Affirmed in Part on 07/13/2009), where the rejections of claims 4, 8, 9, 10, 19, 23, 24, 25 were overturned.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. George Gates (Reg. No. 33,500) on 09/04/09.

The claims have been amended as follows:

Claims 1, 7, 16, 22 are cancelled.

1. (CANCELED)

2. (CURRENTLY AMENDED) The method of claim [[1]] 4, wherein the location information comprises E911 location information.

3. (CURRENTLY AMENDED) The method of claim [[1]] 4, wherein the information further includes one or more types of information selected from a group comprising Hand Off (HO)

information, Power information, Measurements, and System Parameters from the wireless network.

4. (CURRENTLY AMENDED) Δ [[The]] method of claim 1 for operating a wireless network, comprising:

(a) collecting and analyzing information from the wireless network into a collection and analysis system coupled to the wireless network, wherein the information includes location information on a plurality of mobile transceivers communicating with the wireless network and the information is collected when certain defined thresholds are triggered; and

(b) optimizing the wireless network's operation from a network control system coupled to the wireless network by intelligently steering radio frequency (RF) signal beams transmitted from the wireless network in the direction of one or more of the plurality of mobile transceivers using the collected and analyzed information.

5. (CURRENTLY AMENDED) The method of claim [[1]] 8, wherein the optimizing step further comprises dynamically allocating radio frequency (RF) signal power in the wireless network based on the collected and analyzed information.

6. (ORIGINAL) The method of claim 5, wherein the dynamically allocating step further comprises dynamically assigning RF signal power to cells, sectors within cells, and mobile transceivers based on the collected and analyzed information.

7. (CANCELED)

8. (CURRENTLY AMENDED) A [[The]] method of claim 7 for operating a wireless network, comprising:

(a) collecting and analyzing information from the wireless network into a collection and analysis system coupled to the wireless network, wherein the information includes location information on a plurality of mobile transceivers communicating with the wireless network; and

(b) optimizing the wireless network's operation from a network control system coupled to the wireless network by intelligently steering radio frequency (RF) signal beams transmitted from the wireless network in the direction of one or more of the plurality of mobile transceivers using the collected and analyzed information, wherein the optimizing step further comprises setting dynamic dedicated handoff (HO) thresholds for individual mobile transceivers based on the collected and analyzed information and the individual mobile transceivers each have a unique, assigned HO (hand off) threshold.

9. (ORIGINAL) The method of claim 8, wherein the optimizing step further comprises performing handoffs for individual mobile transceivers based on their unique, assigned HO (hand off) threshold and their location.

10. (ORIGINAL) The method of claim 9, wherein the performing step comprises performing handoffs for individual mobile transceivers in order to minimize interference levels.

11. (CANCELED)

12. (CURRENTLY AMENDED) The method of claim [[1]] 8, wherein the intelligently steering step further comprises intelligently forming an RF signal beam based on the collected and analyzed information.

13. (CURRENTLY AMENDED) The method of claim [[1]] 4, further comprising identifying and resolving problems using the collected and analyzed information.

14. (ORIGINAL) The method of claim 13, wherein the identifying and resolving step further comprises identifying problems in the wireless network, and correlating the identified problems with the collected and analyzed information.

15. (ORIGINAL) The method of claim 14, wherein the correlating step further comprises correlating the identified problems with mobile transceiver location information from the collected and analyzed information.

16. (CANCELED)

17. (CURRENTLY AMENDED) The system of claim [[16]] 19, wherein the location information comprises E911 location information.

18. (CURRENTLY AMENDED) The system of claim [[16]] 19, wherein the information further includes one or more types of information selected from a group comprising Hand Off (HO) information, Power information, Measurements, and System Parameters from the wireless network.

19. (CURRENTLY AMENDED) A [[The]] system of claim 16 for operating a wireless communications network, comprising:

(a) a data collection and filter system, coupled to the wireless communications system, for collecting and analyzing information from the wireless network, wherein the information includes location information on a plurality of mobile transceivers communicating with the wireless network and the information is collected when certain defined thresholds are triggered; and

(b) a network control system, coupled to the wireless communications system and the data collection and filter system, for optimizing the wireless network's operation by intelligently steering radio frequency (RF) signal beams transmitted from the wireless network in the direction of one or more of the plurality of mobile transceivers using the collected and analyzed information.

20. (CURRENTLY AMENDED) The system of claim [[16]] 23, wherein the network control further comprises means for dynamically allocating radio frequency (RF) signal power in the wireless network based on the collected and analyzed information.

21. (ORIGINAL) The system of claim 20, wherein the means for dynamically allocating further comprises means for dynamically assigning RF signal power to cells, sectors within cells, and mobile transceivers based on the collected and analyzed information.

22. (CANCELED)

23. (CURRENTLY AMENDED) A [[The]] system of claim 22 for operating a wireless communications network, comprising:

(a) a data collection and filter system, coupled to the wireless communications system, for collecting and analyzing information from the wireless network, wherein the information includes location information on a plurality of mobile transceivers communicating with the wireless network; and

(b) a network control system, coupled to the wireless communications system and the data collection and filter system, for optimizing the wireless network's operation by intelligently steering radio frequency (RF) signal beams transmitted from the wireless network in the direction of one or more of the plurality of mobile transceivers using the collected and analyzed information, wherein the network control further comprises means for setting dynamic dedicated handoff (HO) thresholds for individual mobile transceivers based on the collected and analyzed information and the individual mobile transceivers each have a unique, assigned HO (hand off) threshold.

24. (ORIGINAL) The system of claim 23, wherein the network control further comprises means for performing handoffs for individual mobile transceivers based on their unique, assigned HO (hand off) threshold and their location.

25. (ORIGINAL) The system of claim 24, wherein the means for performing comprises means for performing handoffs for individual mobile transceivers in order to minimize interference levels.

26. (CANCELED)

27. (CURRENTLY AMENDED) The system of claim [[16]] 23, wherein the means for intelligently steering further comprises means for intelligently forming an RF signal beam based on the collected and analyzed information.

28. (CURRENTLY AMENDED) The system of claim [[16]] 19, wherein the data collection and analysis system further comprises means for identifying and resolving problems using the collected and analyzed information.

29. (ORIGINAL) The system of claim 28, wherein the means for identifying and resolving further comprises means for identifying problems in the wireless network, and correlating the identified problems with the collected and analyzed information.

30. (ORIGINAL) The system of claim 29, wherein the means for correlating further comprises means for correlating the identified problems with mobile transceiver location information from the collected and analyzed information.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Claims 1, 7, 11, 16, 22, 26 are cancelled.

Claims 2-6, 8-10, 12-15, 17-21, 23-25, 27-30 are patentable.

The entire prior-art combination **disclosed** (in previous office-action of this case) fails to anticipate or render the claimed limitations in combination with all the recited limitations of the disclosed independent claims obvious (**viewed the entire claim as a whole**), over any of the prior art of record, alone or in combination.

Consequently, the disclosed independent claims are allowed on behalf of above-discussed reasons, and also preserved via Applicants arguments and remarks filed on 10/22/2007 as well. Since the disclosed dependent claims are dependant on one of the above independent claims, therefore they are also patentable.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2617

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sharad Rampuria/
Primary Examiner
Art Unit 2617